

PATENT
MB&P Ref. No.: I 3527-RO/SEI
Atty. Dkt. No. INFN/MB0061

REMARKS

This is intended as a full and complete response to the Final Office Action dated February 16, 2006, having a shortened statutory period for response set to expire on May 16, 2006. Applicant submits this response to place the application in condition for allowance or in better form for appeal. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1-4 and 16-20 are pending in the application. Claims 5-9 and 12-15 have been withdrawn from consideration. Claims 1-4 and 16-20 remain pending following entry of this response. Claims 1, 3, 4 and 16-18 have been amended to more clearly recite the features of the claimed invention. Applicants submit that the amendments do not introduce new matter and do not raise new issues.

Interview Summary

On May 15, 2006, a telephonic interview was held between Joseph M. Jong (attorney for Applicant) and Examiner Ahmed Sefer. The parties discussed the cited reference *Pasch* with respect to Claim 1.

During the interview, Applicant argued that the cited reference *Pasch* does not disclose "each and every element as set forth in the claim". However, no agreement could be reached at the time of the interview.

Claim Rejections - 35 USC § 102

Claims 1, 3, 4, 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by *Pasch et al.* (hereinafter "*Pasch*") USPN 6,239,491.

Applicant respectfully traverses this rejection.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

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In this case, *Pasch* does not disclose "each and every element as set forth in the claim". For example, *Pasch* does not disclose a first patterned metal layer (or plane) and a second patterned metal layer (or plane). As is well known, a patterned metal layer is a metal layer which is deposited and then patterned to define a metallization structure. *Pasch* discloses only one patterned metal layer 180 for forming a plurality of metal interconnects 180a-180f. (See *Pasch*, Fig. 3, Col. 8, lines 66 to Col. 9, line 15). All remaining layers on the substrate 2 shown in Figure 3 of *Pasch* are clearly described as dielectric layers (i.e., "first dielectric layer 130", "second dielectric layer 150" and "third dielectric layer 170") which are patterned to form metallization schemes. The Examiner cites the local interconnect 160 of *Pasch* as "a first conductor" in "a first patterned metal plane". However, *Pasch* clearly teaches that openings are cut through the dielectric layer 150 for forming vias and local interconnects such as the "local interconnect 160" (*Pasch*, Col. 7, lines 56-64), and thus, the "local interconnect 160" is not part of a patterned metal plane (or patterned metal layer).

Furthermore, *Pasch* does not disclose that the second contact is electrically connected to the second conductor without an intermediate connection to any conductor of the first metal layer (or plane). *Pasch* clearly shows that filled vias 152, 154, 157 and 158 and the local interconnect 160 are in the same layer/plane, and that the gate electrode 14 is connected to metal interconnect 180a through another conductor (i.e., filled via 154) of the same layer/plane which contains the local interconnect 160.

Therefore, the claims are believed to be in condition for allowance, and allowance of the claims is respectfully requested.

Claims 18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by *Pasch*. Applicant respectfully traverses this rejection.

In this case, *Pasch* does not disclose "each and every element as set forth in the claim". For example, similar to the discussion above, *Pasch* does not disclose a plurality of first conductors disposed in a first patterned metal layer (or plane) and a plurality of second conductors disposed in a second patterned metal layer (or plane). As another example, *Pasch* does not disclose that one of the second conductors is

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disposed above the second contact in the substrate-normal direction and directly connected to the second contact surface.

Therefore, the claims are believed to be in condition for allowance, and allowance of the claims is respectfully requested.

Claim Rejections - 35 USC § 103

Claims 2 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Pasch* in view of *Yokoyama* US PG-Pub 2001/0029079.

The Examiner takes the position that "it would have been obvious to one skilled in the art at the time the invention was made to incorporate *Yokoyama* teachings since that would provide the advantages of forming both MOS and bipolar transistors on the same substrate."

Applicant respectfully traverses this rejection.

The Examiner bears the initial burden of establishing a *prima facie* case of obviousness. See MPEP § 2142. To establish a *prima facie* case of obviousness three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Third, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP § 2143. The present rejection fails to establish at least the third criteria.

As discussed above with respect to claims 1 and 18, *Pasch* does not disclose "each and every element as set forth in the claim". Therefore, the claims are believed to be in condition for allowance, and allowance of the claims is respectfully requested.

Conclusion

The secondary references made of record are noted. However, it is believed that the secondary references are no more pertinent to the Applicant's disclosure than the primary references cited in the office action. Therefore, Applicant believes that a

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detailed discussion of the secondary references is not necessary for a full and complete response to this office action.

Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully requests that the claims be allowed.

Respectfully submitted, and
S-signed pursuant to 37 CFR 1.4,

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